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# New Paradigms for Preserving Old Buildings

In the book *How Buildings Learn*, Stewart Brand makes the point that "individuals typically learn much faster than whole organizations."[1] He offers as a guideline what robotics engineers call "subsumption architecture"—pushing the power to respond to the bottom of the organization. If this sounds remarkably like the call of government reinvention task forces to "empower" workers by giving them the tools to recognize and solve problems at the resource level, it should come as no surprise that individual workers had already grasped this principle and applied it to their efforts to develop more effective ways to preserve historic structures.

Creation of the Historic Structures Preservation Team in Region Six of the Forest Service had its origins in 1991, with the determination of one Forest Service employee to save the Tollgate Shelter, a badly deteriorated campground shelter on the Mt. Hood National Forest, built in 1936 by the Civilian Conservation Corps. John Platz, a structural engineer, recognized that the condition of the Tollgate Shelter was not simply the result of deferred maintenance, but an acute lack of the specific preservation skills necessary to understand and treat structures pre-dating standardized contemporary materials and construction practices. In Missoula, Montana, Ken Duce and Milo McLeod, respectively Forest Architect and Forest Archeologist on the Lolo National Forest, lobbied intensively for the creation of a Forest Service Region One Preservation Team to address the same fundamental problems. Bernie Weisgerber, a graduate of the NPS Williamsport Preservation Training Center, was hired in 1992 to head the Region One team, and creation of the Region Six team was officially authorized in 1994.

What these programs represent is a vision of an integrated, "systems" approach to assessment, preservation, and maintenance of historic structures. It is an approach that considers people as well as structures, through training in preservation philosophy and methods. It is entrepreneurial in the ability to organize, perform, and assume the risk for successful (and cost-effective) outcome of preservation projects. Administrative overhead is reduced by providing an alternative to the "balkanization" of assessment, design, and treatment partitioned among agency divisions with little contact with the resources or the people actually performing work on them.

The real focal point of agency reinvention efforts is improving service to the client. For preservation specialists, the resource itself is ultimately the "client." A survey of structures built by the Civilian Conservation Corps (CCC) on Forest Service lands in Washington and Oregon revealed that by the mid-1970s only 1,400 structures remained of the 4,000 built between 1933 and 1942. At current estimates, approximately 65 are lost each year through demolition and neglect. The good news is that these figures have been revised downward from the 1988 estimate of 76 structures a year since the creation of the Region Six Historic Structures Team.

Consider the effect that this rate of loss of historic structures would have if reported as mortality in the population of an endangered plant or animal species. Just as the environmental movement has broadened its frame of reference from the protection of individual species to embrace the concepts of biodiversity and management at the ecosystem level, historic preservation has evolved beyond protecting only individual landmark structures or historic districts. Architectural historian Bernard Rudofsky subtitled his book on vernacular architecture, *The Prodigious Builders*, as "notes toward a natural history of architecture with special regard to those species that are traditionally neglected or downright ignored."[2] In such a natural history, the thousands of structures built by the Civilian Conservation Corps are a perfect example of an "ecosystem" of the built environment. Owned and managed by a number of federal and state agencies across a broad geographic range, they share a remarkably consistent design philosophy based on "harmonious adaptability to local characteristics and natural environments."[3] Western log structures from the late-19th and early-20th centuries—ranches, cabins, and town settlements—occupy a similar "ecological niche."

As with other endangered species, the success of efforts to save rustic and vernacular structures depends on answers to the following questions. What value do they have, what use are they, and what are the costs? Use and value in historic preservation are related in the same sense as significance and integrity. Intangible qualities of meaning and experience are reflected at some level in a functional artifact. In 1938, W. Ellis Groben, consulting architect for the Forest Service, addressed the qualities that Forest Service buildings should possess:

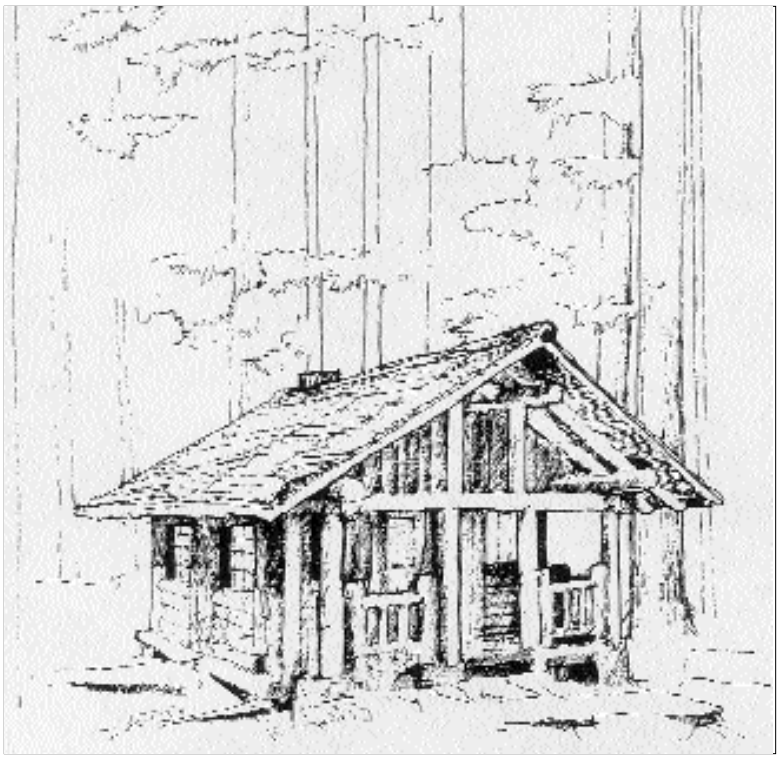
> No matter how well buildings may be designed, with but few exceptions, they seldom enhance the beauty of their natural settings. They are, however, required and necessary to satisfy definite uses which arise to meet human needs, in spite of their encroachment upon Nature's pristine beauty.
>
> While this idealistic attitude is very commendable and worthy of being kept constantly in mind, its application consists chiefly of erecting only such structures as are absolutely essential to fulfill specific requirements and then only of designs which harmonize with, or, to express it differently, are the least objectionable to Nature's particular environment.[4]

Contemporary structures of steel and T-111 plywood may serve a utilitarian purpose, but contrast profoundly with the effect intended by CCC-era designers:

> Successfully handled, [rustic] is a style which, through the use of native materials in proper scale, and through the avoidance of rigid, straight lines, and oversophistication, gives the feeling of having been executed by pioneer craftsmen with limited hand tools. It thus achieves sympathy with natural surroundings and with history.[5]

World War II ended the large-scale work-relief programs that made labor-intensive log and masonry construction feasible on public lands. Interest in rustic architecture declined after the war, and design principles driven by new and cheaper construction methods became standard. Ironically, many surviving structures were on the brink of succumbing to decades of neglect by 1992, when virtually all of them became eligible for the National Register of Historic Places. Driven by the requirements of Section 106 and Section 110 of the National Historic Preservation Act, a number of agencies were suddenly faced with having to develop a completely new approach to treating structures that had become, in many instances, dangerously unsound.

*Tollgate Shelter, Mt.Hood National Forest,constructed in 1936 by the Civilian Conservation Corps. Drawing by Paul John Neidinger, Williamsport Preservation Training Center.*



*Lost Lake Winter/Summer Shelter, Mt.Hood National Forest, constructed in 1993-1994, by the USDA Forest Service Region Six Historic Structures Team.Drawing by Paul John Neidinger, Williamsport Preservation Training Center.*

In the use/value/costs equation, preservation law and policy weighted the scales in favor of preservation. At the same time many land use agencies found their traditional missions changing, with recreation assuming an increasingly important role. An emerging focus on principles of sustainable design also added impetus to the idea of retaining and recycling existing buildings.

Rustic and traditional vernacular buildings and landscapes have always been a powerful force in shaping public perceptions and agency image. However, while most of these resources have the potential to be reclaimed and maintained in use without loss of historic identity and integrity, many have been allowed to deteriorate because the costs of repair were assumed to be prohibitive. Others received inappropriate repairs which, because of lack of understanding of period construction techniques, actually worsened existing problems.

These conditions are due, in part, to a widespread perception that historic preservation consists of "restoring" buildings, and inevitably requires a full-blown design effort, endless compliance reviews, and major structural interventions. By contrast, the preservation team approach begins with the premise that "preservation is maintenance," and that treatments are based on a thorough understanding of historic materials, structural characteristics, and building methods.

If the current movement to reinvent, re-engineer, and downsize government sometimes recalls the ancient Chinese curse, "may you live in interesting times," it also provides an opportunity to consider how people are making this process work from the ground up. Institutions and government agencies at all levels are responding to the same pressures—to do more with less, and to do it more effectively. Forest Service Director Jack Ward Thomas characterized his agency's options as "grow or die," and offered the corollary, "grow and live" as the challenge to be met.

With virtually all public institutions facing the same challenge, certain principles are becoming established as a blueprint for change. "Empowering" individuals through improved training, responsibility, and accountability makes smaller workforces more productive. Partnerships focus collective interests and capabilities. Eliminating layers of administrative overhead places more resources at the point of effect. Adoption of "whole systems" approaches to resource management replaces artificial distinctions which distort understanding of the environment, function, or process involved. Preservation teams like those in Forest Service Regions One and Six represent this new paradigm and have the potential to significantly impact the treatment of historic resources.

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**Notes**

1 Stewart Brand, *How Buildings Learn: What Happens After They're Built* (New York: Viking, 1994), p. 189.

2 Bernard Rudofsky, *The Prodigious Builders* (New York: Harcourt, Brace, Jovanovich, 1977).

3 T.W. Norcross, *Acceptable Plans: Forest Service Administrative Buildings* (USDA Forest Service, 1938) introduction.

4 *ibid.* foreword.

5 Laura Soulliere Harrison, *Architecture in the Parks, National Landmark Theme Study*. (National Park Service, Department of the Interior, 1986), p. 8.

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